

I. Amendments to the Claims

This listing of claims replaces, without prejudice, all prior versions and listings of claims in the application:

Listing of Claims:

1. (Cancelled).
2. (Previously Presented) The method of claim 19 wherein said at least one interfering signal comprises a synchronization signal.
3. (Previously Presented) The method of claim 19 wherein at least two interfering signals are transmitted by said transmitter and said receiver determines each of said at least two interfering signals and their respective received power levels and subtracts those determined interfering signals at their respective received power levels from said total received signal.
4. (Previously Presented) The method of claim 3 wherein said at least two interfering signals comprise a first synchronization signal for determining slot timing in signals transmitted by said transmitter and a second synchronization signal for determining frame timing in signals transmitted by said transmitter.

5. (Previously Presented) The method of claim 19 wherein said at least one interfering signal is a communication system control signal.

6. (Cancelled).

7. (Previously Presented) The method of claim 19 wherein said interfering signal determined in step (iii) comprises a non-interfering signal to at least one other receiver.

8. (Previously Presented) The method of claim 7 wherein said interfering signal determined in step (iii) comprises a pilot signal.

9. (Previously Presented) The method of claim 19 wherein said other transmitter comprises an adjacent base station.

10. (Previously Presented) The method of claim 19 wherein said other transmitter comprises an adjacent sector of a multi-sector base station.

11. (Cancelled).

12. (Previously Presented) The method of claim 19 wherein the step of comparing is performed at predefined intervals.

Claims 13-18 (Cancelled).

19. (Previously Presented) A method of improving reception in a multiple access communications system, comprising the steps of:

- (i) determining at least one interfering signal transmitted from a transmitter;
- (ii) determining the received power level at a receiver of said at least one determined interfering signal;
- (iii) determining at least one interfering signal transmitted from another transmitter;
- (iv) determining the received power level at said receiver of said at least one determined interfering signal from said another transmitter;
- (v) subtracting said at least one determined interfering signal at step (i) at said received power level determined at step (ii), from a total signal received at said receiver;
- (vi) comparing the received power level determined in step (iv) to a predefined threshold level and omitting step (vii) when said threshold is not exceeded;
- (vii) subtracting said at least one determined interfering signal at step (iii) at said received power level determined at step (iv) from said total signal received at said receiver; and
- (vii) determining a desired signal from the result of said subtractions.

20. (Previously Presented) A method of improving reception in a multiple access communications system, comprising the steps of:

- (i) determining at least one interfering signal transmitted from a transmitter;
- (ii) determining the received power level at a receiver of said at least one determined interfering signal;
- (iii) determining at least one interfering signal transmitted from another transmitter;
- (iv) determining the received power level at said receiver of said at least one determined interfering signal from said another transmitter;
- (v) subtracting said at least one determined interfering signal at step (i) at said received power level determined at step (ii), from a total signal received at said receiver;
- (vi) subtracting said at least one determined interfering signal at step (iii) at said received power level determined at step (iv) from said total signal received at said receiver; and
- (vii) determining a desired signal from the result of said subtractions, wherein steps (iii) and (iv) are performed to select, from at least two other transmitters, the transmitter with the highest received power level in step (iv) and step (vi) is performed for said selected other transmitter.

21. (Previously Presented) The method of claim 20 wherein said at least one interfering signal comprises a synchronization signal.

22. (Previously Presented) The method of claim 20 wherein at least two interfering signals are transmitted by said transmitter and said receiver determines each of said at least two interfering signals and their respective received power levels and subtracts those determined interfering signals at their respective received power levels from said total received signal.

23. (Previously Presented) The method of claim 22 wherein said at least two interfering signals comprise a first synchronization signal for determining slot timing in signals transmitted by said transmitter and a second synchronization signal for determining frame timing in signals transmitted by said transmitter.

24. (Previously Presented) The method of claim 20 wherein said at least one interfering signal comprises a communication system control signal.

25. (Previously Presented) The method of claim 20 wherein said interfering signal determined in step (iii) comprises a non-interfering signal to at least one other receiver.

26. (Previously Presented) The method of claim 25 wherein said

interfering signal determined in step (iii) comprises a pilot signal.

27. (Previously Presented) The method of claim 20 wherein said other transmitter comprises an adjacent base station.

28. (Previously Presented) The method of claim 20 wherein said other transmitter comprises an adjacent sector of a multi-sector base station.

29. (Previously Presented) The method of claim 20 wherein steps (iii) and (iv) are performed at predefined intervals to select, from at least two other transmitters, the transmitter with the highest received power level in step (iv), and step (vi) is performed for said selected other transmitter.

Claims 30 – 39 (Cancelled).

40. (Currently Amended) A method of improving reception in a multiple access communications system, comprising the steps of:

(i) determining the received power level at a receiver of at least one interfering signal transmitted from a transmitter, wherein said at least one interfering signal is predetermined;

(ii) subtracting said at least one interfering signal, at said received power level, from a total signal received at said receiver;

- (iii) determining a desired signal from the result of said subtraction;
- (iv) determining the received power level at said receiver of at least one interfering signal from another transmitter, wherein said at least one interfering signal from another transmitter is known a priori;
- (v) performing step (ii) by also subtracting said at least one interfering signal from another transmitter at the received power level determined at step (iv) from said total signal received at said receiver;
- (vi) performing step (iii) to determine a desired signal from the result of the subtractions; and

~~The method of claim 35 further comprising the step of~~ (vii) comparing the received power level determined in step (a) (iv) to a predefined threshold level and omitting steps (b) (v) and (c) (vi) when said threshold is not exceeded.

41. (Previously Presented) The method of claim 40 wherein the step of comparing is performed at predefined intervals.

42. (Currently Amended) A method of improving reception in a multiple access communications system, comprising the steps of:

- (i) determining the received power level at a receiver of at least one interfering signal transmitted from a transmitter, wherein said at least one interfering signal is predetermined;
- (ii) subtracting said at least one interfering signal, at said received

power level, from a total signal received at said receiver;

(iii) determining a desired signal from the result of said subtraction;

(iv) determining the received power level at said receiver of at least one interfering signal from another transmitter, wherein said at least one interfering signal from another transmitter is known a priori;

(v) performing step (ii) by also subtracting said at least one interfering signal from another transmitter at the received power level determined at step (iv) from said total signal received at said receiver; and

(vi) performing step (iii) to determine a desired signal from the result of the subtractions.

The method of claim 35 wherein step ~~(a)~~ (iv) is performed to select, from at least two other transmitters, the transmitter with the highest received power level in step ~~(a)~~ (iv) and steps ~~(b)~~ (v) and ~~(c)~~ (vi) are performed for said selected other transmitter.

43. (Currently Amended) The method of claim 42 wherein step ~~(a)~~ (iv) is performed at predefined intervals to select the transmitter with the highest received power level and steps ~~(b)~~ (v) and ~~(c)~~ (vi) are performed for said selected other transmitter.